IN THE SPECIFICATION:

Please amend pages 1 and 2 of the specification as follows:

DYNAMIC ALLOCATION OF SHARED NETWORK RESOURCES BETWEEN CONNECTION-ORIENTED AND CONNECTIONLESS TRAFFIC

CROSS-REFERENCE TO RELATED APPLICATIONS

This is the first application filed for the present invention.

MICROFICHE APPENDIX

Not Applicable.

TECHNICAL FIELD

The present invention relates to resource management in communications networks, and in particular to dynamic allocation of shared network resources between connection-oriented and connectionless traffic in a communications network.

BACKGROUND OF THE INVENTION

In the modern network space, packetized data traffic of various different protocols (e.g. internet protocol, frame relay, asynchronous transfer mode, etc.) is transported over a common network infrastructure. Each protocol provides its own packet (or frame) size and format standards. Additionally, some protocols (e.g. IP) are specifically designed to allow packets having widely varying lengths. New routing protocols, for example the multi-protocol label switching (MPLS) protocol have been proposed to facilitate multi-protocol traffic across a common network infrastructure.

Under the MPLS protocol, label switched ~~packets~~ paths (LSPs) are propagated across the network hop-by-hop along a path that is set up at the beginning of a communications session. In general, the label assigned to the LSP can be different for each hop, with the label conversion being performed by the node serving the respective hop. Resources of each hop (i.e. the node serving the hop) of the path are reserved during set-up of the path, and normally will not be available for carrying other traffic until the path is released.

The mapping of an end-to-end path at the beginning of a communications session characterizes the MPLS protocol as "connection oriented". Other protocols, (such as IP~~, ATM and Frame Relay~~) which do not transport data over predefined end-to-end paths are referred to as "connectionless". Typically, connectionless traffic is routed across a network using a shortest-path or least-cost-path routing protocol, such as, for example, the Interior Gateway Protocol (IGP). In general, a metric (e.g. a link distance vector, or a link cost factor) is assigned to each link and used within each router for mapping packet destination addresses to downstream links. The metric is normally provisioned for traffic engineering, and reflects not only geographic distances, but also provisioned bandwidth of each link. A higher metric on a particular link makes that link less attractive for carrying connectionless traffic, so that the IGP will normally operate to route connectionless traffic away from that link. Both connection-oriented and connectionless traffic may be carried over shared network infrastructure. This situation is normally accommodated by adjusting the provisioned IGP metric to reflect an average anticipated amount of bandwidth allocated to the connection-oriented